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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/617,855

07/14/2003

Dong-Ryeol Lee

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EXAMINER

GOMA, TAWFIK A

ART UNIT

PAPER NUMBER

2627

MAIL DATE

DELIVERY MODE

06/23/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### **DETAILED ACTION**

This action is in response to the arguments filed on 5/27/2008.

#### ***Response to Arguments***

Applicant's arguments filed 5/27/2008 have been fully considered but they are not persuasive. Applicant's arguments that the diffraction grating of Park does not focus the light because it acts to separate the light into orders is not persuasive for the following reasons: First, the examiner agrees that the diffraction grating changes the direction of the incident light, but the act of focusing light on a surface is accomplished by changing the direction of the light such that more or less light is converged at a given point. Park discloses that the different orders of light are directed by the grating to the different points on the light detection element by changing the direction of the light using the grating (par. 33). Furthermore, applicant's definition of a diffraction grating also supports this position, since a diffraction grating has grooves which "concentrate reflected or transmitted electromagnetic energy in discrete directions, called 'orders', or 'spectral orders'." The mere fact that the grating of Park acts to separate the light into discrete orders does not negate the disclosure of *focusing* the separate orders onto the desired positions of the detecting element. That is, Park's disclosure of focusing or directing any of one of the orders of light discloses the claimed invention of focusing the light emitted from the light source. Secondly, applicant's optical element is a hologram optical element which is used to focus the light using the diffractive properties of a hologram, such that light is converged or diverged on a particular position. This function is equivalent to the grating of Park which diffracts the light to converge or diverge incident light to positions on the optical element.

Furthermore, applicant's arguments that directing light in a different direction cannot be

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considered focusing is not persuasive. Focusing of light, as discussed in the previous office action, is directing of light such that it converges at a certain position. Park's disclosure of directing the light using the grating such that it becomes incident on the location of the detection element is consistent with definition of focusing of light.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAWFIK GOMA whose telephone number is (571)272-4206. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joseph H. Feild/  
Supervisory Patent Examiner, Art Unit  
2627

/Tawfik Goma/  
Examiner, Art Unit 2627

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